WHAT IS CLAIMED IS

- 1. A hybrid system with a controllable function of variable speed transmission adopting a plurality of power sources to cooperate each other for power transmission by way of a complex combination of the power sources, comprising:
 - at least one first electric power driving device being a first power source of the system;
 - at least one fuel driving device being a second power source of the system and started by regular fuel;
 - at least one automatic clutching device controlling clutching actions of the fuel driving device and the first electric power driving device and located between the fuel driving device and the first electric power driving device;
 - at least one continuously variable transmission device proceeding driving actions of continuously variable transmission and further having another power source thereof for driving itself;
 - at least one system-controlling device controlling actions among the first electric power driving device, the fuel driving device and the automatic clutching device.
- 2. The hybrid system with a controllable function of variable speed transmission as cited in claim 1, wherein the fuel driving device further connects to an integrated power assistant device, and the fuel driving device is between the automatic clutching device and the integrated power assistant device for being in a series connection, the integrated power assistant device is capable of starting the fuel driving device rapidly and being as a generator for modulating work loading after the fuel driving device working normally, on the other hand, the integrated power assistant device is another role of power assistant while needing more power output, and the integrated power assistant device is controlled by the system-controlling device as well.
- 3. The hybrid system with a controllable function of variable speed transmission as cited in claim 1, wherein the first electric power driving device is connected to the fuel driving device, the automatic clutching device and the continuously variable transmission device in series.
- 4. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the plurality of power sources comprises at least one of the following: electric power, fuel, solar power energy and the like.

- 5. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the first electric power driving device is a motor and further comprises a motor control unit.
- 6. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the fuel driving device and the automatic clutching device are off as always and combined for power driving by means of the automatic clutching device.
- 7. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the fuel driving device is an engine and further comprises an engine control unit.
- 8. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the regular fuel is one of the following: gasoline, diesel and the like.
- 9. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the automatic clutching device further comprises an auto-control clutch to assemble the fuel driving device and the first electric power driving device in series connection for power driving but with a function of a parallel connection.
- 10. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the integrated power assistant device further comprises a starting generator, a multi-stage power switch unit and a battery control unit.
- 11. The hybrid system with a controllable function of variable speed transmission as cited in claim 3, wherein the continuously variable transmission device further comprises a front pulley and a rear pulley, and each pulley has a movable pulley and a fixed pulley, the movable pulley and the fixed pulley for the front pulley and the movable pulley and the fixed pulley for the rear pulley are designed reversely and symmetrically, further that the four pulleys are connected by means of a V-belt, and at least one power source of the continuously variable transmission device driving the two movable pulleys is one of the following: a hydraulic power driving device, a second electric power driving device and the like.
- 12. The hybrid system with a controllable function of variable speed transmission as cited in claim 2, wherein the first electric power driving device is connected to the fuel driving device, the automatic clutching device and the continuously variable transmission device in series.
- 13. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the plurality of power sources comprises at least one of the following:

electric power, fuel, solar power energy and the like.

- 14. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the first electric power driving device is a motor and further comprises a motor control unit.
- 15. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the fuel driving device and the automatic clutching device are off as always and combined for power driving by means of the automatic clutching device.
- 16. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the fuel driving device is an engine and further comprises an engine control unit.
- 17. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the regular fuel is one of the following: gasoline, diesel and the like.
- 18. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the automatic clutching device further comprises an auto-control clutch to assemble the fuel driving device and the first electric power driving device in series connection for power driving but with a function of a parallel connection.
- 19. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the integrated power assistant device further comprises a starting generator, a multi-stage power switch unit and a battery control unit.
- 20. The hybrid system with a controllable function of variable speed transmission as cited in claim 12, wherein the continuously variable transmission device further comprises a front pulley and a rear pulley, and each pulley has a movable pulley and a fixed pulley, the movable pulley and the fixed pulley for the front pulley and the movable pulley and the fixed pulley for the rear pulley are designed reversely and symmetrically, further that the four pulleys are connected by means of a V-belt, and at least one power source of the continuously variable transmission device driving the two movable pulleys is one of the following: a hydraulic power driving device, a second electric power driving device and the like.